DETAILED COMMENTS
ON THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
PREPARED BY THE
FEDERAL HIGHWAY ADMINISTRATION
FOR
SEGMENT G, GRAND PARKWAY PROJECT
HARRIS AND MONTGOMERY COUNTIES, TEXAS

Background

Pursuant to the National Environmental Policy Act (NEPA), the Federal Highway Administration (FHWA) and the Department of Transportation (DOT) have prepared a Draft Environmental Impact Statement (DEIS) for the proposed construction of Segment G of State Highway 99 (Grand Parkway). The proposed project consists of a controlled access highway from I-45 in Harris County to US 59 in Montgomery County, a distance of approximately 13 miles.

Comments on Wetland and Associated Mitigation

Since specific details of avoidance, minimization and mitigation can only be addressed after a desired alignment has been identified in the Clean Water Act (CWA) Section 404 permit application and Final EIS, our following comments are general in nature and meant to inform the applicant as to CWA Section 404 guidelines. We may have additional comments if a public notice is issued for the Section 404 permit(s).

NEPA requires that resources examined for potential impacts include those potentially subject to direct, secondary and cumulative impacts. In analyzing the potential for impacts under NEPA, FHWA must examine all wetlands and other aquatic resources in the project area, not just those considered to be "jurisdictional" for permitting purposes by the Corps of Engineers.

In permit actions under CWA Section 404, however, EPA guidelines promulgated under Section 404(b)(1) require specific sequencing of mitigation efforts for losses of wetlands occasioned by permit actions under CWA §404. Therefore, the applicant should select the alignment that poses the least damaging practicable alternative. All efforts to minimize impacts must be undertaken and all remaining unavoidable impacts must have compensation. Efforts to minimize impact such as avoiding direct fill by culverting or bridging hydrologic flow should be undertaken. All efforts to reduce impacts by avoiding disruption of surface hydrologic flow by impounding or draining should be undertaken. Secondary impacts such as altering hydrology to wetlands must be accounted for.

There are four alignments studied in the DEIS, designated A, B, C, and D. Alternative B has the fewest impacts to adjacent wetlands (30.6 acres), isolated wetlands (17.;6 acres) and total wetlands 48.2 acres) [Table 4-22, page 4-74, Vol II]. Alternative B also has the fewest total impacts to forests by 84 acres [Table 4-23, page 4-76, Vol II]. In addition, Alternative B would apparently have less impact to the White Oak Creek forested corridor. The others more closely parallel White Oak Creek, appearing to impact more reparian forest [Exhibit G – 50, Bottomland Hardwoods and Riparian Forest]. We further note that alternative B is the lowest cost alternative [Table 4-7, page 4-29, Vol II]. Therefore, we recommend Alternative B, since it appears to be the least damaging practicable

alternative.

In addition, alignment of adjoining segments must be considered because the location of the end of this segment may preclude alternatives for the alignment of the next segment. We are especially concerned with the eastern terminus for Segment G which ends at U.S. 59 just a few miles due west of Lake Houston State Park. The Final EIS should discuss whether the proposed alignment of Segment G will preclude alternatives that would avoid the park if the next segment is built.

EPA recommends that the applicant work with the resource agencies to develop an adequate mitigation plan after it has been determined that the least damaging practicable alternative has been selected, all efforts to avoid and minimize impacts has occurred and that only unavoidable impacts remain.

In summary, we recommend that FHWA take into consideration all wetlands in the project area, whether jurisdictional or not, for purposes of alternatives and compensatory mitigation. Although application of such presumptions would result in more wetland protection than legally required, this approach would still be entirely consistent with the intent and goals of NEPA.

Stream Impacts

Since there will probably be many stream crossings and we have no site specific information, we can only make general recommendations at this time to minimize impacts.

1. The goal of the design should be to make the highway "invisible" to the streams. The best way to do that is to build a span bridge. This should be done for all perennial streams. To avoid floodplain impacts, crossings should span the entire stream corridor where possible.

2. Any floodplain mitigation areas should not be constructed within forested wetland or riparian areas. Detention/retention basins, if needed, should be constructed in non-forested upland areas.

3. Where channel work is needed, it should be kept to the minimum necessary. Precautions should be taken to avoid creating a situation which would encourage head-cutting. In particular, channel grades at the culverts and bridges should remain at their existing levels.

4. If a series of box culverts is installed to carry high flows, the stream will try to recreate a low flow channel. In this process, some of the box culverts built at the same elevation may become clogged with sediment and debris over time. To minimize this, one culvert should be designed to handle frequent flows (i.e. "bankfull"), and others should be at higher elevations for less frequent events.

5. Minimize impacts to the riparian corridor, especially forested areas. For new crossings, already cleared areas in the floodplain should be used when possible.

6. To reduce the width of impact, avoid clearing the entire right-of-way through the riparian area or floodplain. Only clear what is needed for construction and access. Also consider using barricades in the median to separate lanes so the median can be reduced. Also avoid constructing feeder roads across floodplains. Road crossings should be perpendicular to the channel.

7. Minimize impacts to the creek banks (soil and vegetation). Stabilize and replant disturbed banks as soon as construction at that point is finished.

8. All best management practices should be used to minimize erosion of banks and bare soil, and siltation of streams. Bare soil should be stabilized and re-vegetated as soon as possible. Hay bales and silt fences should be inspected and repaired as needed after each rainfall event that creates runoff. All silt fences should be parallel to contours. Long and steep slopes may need multiple rows of fencing.

9. Wetlands or forested floodplain should not be used for staging or storage areas or for borrow areas.

10. The contractor should be thoroughly briefed on all permit conditions. Copies of the issued Section 404 permit should be posted at the project site during construction for easy reference, to avoid misunderstanding and inadvertent violations.

General

We understand that the proposed I-69 will pass near the vicinity of Houston, and in the general area of the north and west segments of the Grand Parkway. Since both project are still in the DEIS stage and under the control of the same agencies (FHWA and TXDOT), we recommend studying ways to combine the two highways where feasible. This could avoid significant environmental impacts as well as save money.

Air Quality

1. The document refers in several places to the June 3, 2005 USDOT conformity finding on the area's Regional Transportation Plan (RTP). The Houston-Galveston Area Coucil of Governments will have produced a new RTP prior to the finalization of this DEIS, with a new USDOT conformity finding. Please ensure the references are updated to incorporate the most recent conformity finding.

2. A correction to the National Ambient Air Quality Standards (NAAQS) table on p. 3-14. On October 17, 2006 EPA revised the NAAQS for PM2.5 and PM10 (71 FR 61236). The correct PM NAAQS are as follows:

PM10: annual standard has been revoked; 24-hr standard unchanged.
PM2.5: annual standard unchanged; 24-hr standard dropped to 35 ug/m3.

3. First sentence on p. 3-17 is " The health risk from air pollutants is generally determined on a regional basis by the EPA, whish designates areas with potential threat to human health as non-attainment areas for specific air pollutants." This sentence refers to the criteria air pollutants, and not air toxics, and so should be removed from this section.

4. EPA signed a new final rule for Mobile Source Air Toxics on February 9, 2007; publication in the Federal Register is expected shortly. The authors may wish to add the citation for the new rule in the Mobile Source Air Toxics section on p. 4-25.